

ENVIRONMENTAL ASSESSMENT
Issuance of 10-Year Grazing Lease for the Rice Valley Allotment
CA-660-EA06-55

U.S. Department of the Interior
Bureau of Land Management
Palm Springs South Coast Field Office
January 2007

CHAPTER 1: INTRODUCTION

A. Summary

The Bureau of Land Management (BLM) is proposing to issue a ten year lease on the Rice Valley Allotment to authorize livestock grazing in accordance with law and policy described in the Purpose and Need section below. The following is a summary of the current situation:

Public land Acres in allotment:	74,740
Critical Habitat Acres (species):	0
Area of Desert Wildlife Management Area	0
Kind of livestock:	Sheep
Current authorized Use:	Ephemeral
Ephemeral or perennial:	Ephemeral
Plan Area:	NECO
Identified for voluntary relinquishment:	No

B. Background

The Bureau of Land Management (BLM) is proposing to issue a ten-year lease on the Rice Valley Allotment to authorize sheep grazing on 74,740 acres of public land located approximately 26 miles northwest of Blythe, California in Riverside County. This grazing allotment is characterized by Sonoran creosotebush scrub and desert wash woodlands with elevations ranging between 800 and 1600 feet above mean sea level.

The lease for the Rice Valley Allotment expired in 2000, however, it was subsequently renewed under the authority of Public Law 106-113 for 10 years with the same terms and conditions as the expired lease. Public Law 106-113 requires compliance with all applicable laws and regulations including the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). Following the analysis of environmental impacts, this grazing lease may be approved, canceled, suspended or modified, in whole or in part, to meet the requirements of such applicable laws and regulations.

On April 24, 2006, BLM received and processed forms transferring the base property of the Rice Valley Allotment from the previous lessee to Lava Lake Land & Livestock, LLC.

C. Tiering to Northern and Eastern Colorado Desert Coordinated Management Plan and Final Environmental Impact Statement (NECO); Record of Decision dated December 19, 2002.

This EA is tiered to the NECO Plan Final EIS and provides site-specific analysis for this grazing allotment. Tiering helps focus this EA more sharply on the significant issues related to grazing while relying on the NECO Plan analysis for background. Analysis of environmental issues

previously considered and addressed in the NECO Plan will be incorporated by reference.

A summary of the analysis tiered in this EA is as follows:

1. The NECO Plan amended the California Desert Conservation Area (CDCA) Plan of 1980 for purposes of developing and establishing conservation strategies for special status plant and animal species within the Colorado Desert. As part of this conservation strategy, the BLM determined which public lands would be available or unavailable for livestock grazing based, in part, on impacts to these species. In addition, the NECO Plan established programmatic management prescriptions including regional land health standards and guidelines; utilization prescriptions for perennial species; restrictions on sheep grazing within tortoise habitat; monitoring requirements; and specific management prescriptions for Desert Wildlife Management Areas (DWMAs) such as the elimination of ephemeral authorizations and the implementation of an ephemeral forage production threshold of 200 pounds per acre (NECO Plan, section 2.1.3 pg. 2-13 and 2-15 and Appendix C). This EA analyzes the specific application of the programmatic management prescriptions of the NECO Plan and considers alternative means to achieve the purpose and need on this allotment as described in Section C of this chapter.

2. The NECO Plan considered a range of alternatives for the livestock grazing program, including more or less restrictive management approaches within the 5.5 million acre planning area. This EA analyzes the range of alternatives for grazing consistent with the NECO Plan, including a proposed action and continuation of current management (No Action). A no-grazing alternative is not considered as no issues were identified in the NECO Plan that would necessitate making all of the Rice Valley Allotment unavailable to grazing.

D. Purpose and Need for the Proposed Action

The purpose of the proposed action is to allow sheep grazing on public lands, determined suitable for this use, in a manner that is consistent with law and regulation. Actions must be in conformance with the implementing regulations for the National Environmental Policy Act, NEPA (40 CFR Part 1500), the Federal Land Policy and Management Act (FLPMA), BLM grazing regulations (43 CFR Part 4100), and Public Law 106-113 section 325.

E. LAND USE PLAN CONFORMANCE and Other Regulatory Compliance:

The proposed action is in conformance with the following plans:

The California Desert Conservation Area Plan of 1980 (CDCA Plan), as amended.

The Northern & Eastern Colorado Desert Coordinated Management Plan of December 19, 2002 (NECO), specifically:

- Modification of the Allotment Boundary, as stated in Section 2.3.1.2 of the NECO

Plan (page 2-46), provides that "9,254 acres in the southwestern portion of the Rice Valley sheep allotment would no longer be available for domestic sheep use because it is less than 9 miles from occupied bighorn sheep range in the Granite and Palen Mountains."

Rangeland Health Fall Back Standards and Guidelines for Livestock Grazing remain in effect until CDD S&G are approved by the Secretary of the Interior:

The allotment does meet the Secretary of the Interior Approved Rangeland Health Standards as follows

Table 1: 1999 Rangeland Health Assessment

Rangeland Health Standard	Meets Standard	Does Not Meet Standard	Impacts from Livestock Yes or No	Remarks
Soils	X	n/a	n/a	
Riparian	X	n/a	n/a	
Stream Channel	X	n/a	n/a	
Native Species	X	n/a	n/a	

June 2, 2000 Rangeland Health determinations were completed.

Authority:

1. General Grazing

Authority for the proposed action includes:

- the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) as amended by the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.);
- the Taylor Grazing Act of June 28, 1934 as amended (43 United States Code 315, 315a through 315r);
- Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); and the
- Public land orders, executive orders, and agreements authorize the Secretary to administer livestock grazing on specified lands under the Taylor Grazing Act or other authority as specified.

2. State Historic Preservation Officer Protocol Amendment for Renewal of Grazing Leases:

In August 2004 the State Director, California Bureau of Land Management, and the California State Historic Preservation Officer (SHPO) addressed the issue of the National Historic Preservation Act (NHPA) Section 106 compliance for processing grazing permit lease renewals as defined in 43 CFR 4100.0-5. The State Director and the SHPO

amended the 2004 *State Protocol Agreement between California Bureau of Land Management and The California State Historic Preservation Officer* with the 2004 Grazing Amendment, Supplemental Procedures for Livestock Grazing Permit/Lease Renewal. This amendment allows for the renewal of existing grazing permits prior to completing all NHPA compliance as long as the 2004 State Protocol direction, the BLM 8100 Series Manual Guidelines, and specific amendment direction for planning, inventory methodology, tribal and interested party consultation, evaluation, effect, treatment, and monitoring stipulations are followed.

3. Biological Opinion on the California Desert Conservation Area Plan

BLM will insure compliance with the incidental take statement of the biological opinion issued for the NECO Plan. BLM will immediately report any injuries or mortality to desert tortoises as a result of grazing to the Fish and Wildlife Service. The BLM and USFWS will review the circumstances to determine if any additional protective measures are required. The BLM will compile any instances of take of the desert tortoise due to grazing activities and report annually to the USFWS. If the annual level of take reaches five tortoises for all allotments in the NECO and Northern and Eastern Mojave Desert CDCA plan amendment areas, BLM will meet with USFWS to determine if re-initiation of consultation is necessary on the grazing aspect of the plan.

F. Voluntary Relinquishment

The NECO Plan does not identify this allotment for voluntarily relinquishment. A lessee may request voluntary relinquishment of their lease at any time; however, a plan amendment would be required for subsequent designation of the allotment as unavailable for livestock grazing. If BLM determines that such an amendment is not warranted, the allotment would remain available for livestock grazing and BLM would consider new applications for lease by qualified applicants.

G. Tribes, Individuals, Organizations, or Agencies Consulted

1. Public Participation

Notification of the proposed action and analysis has been prominently posted in the Palm Springs South Coast Field Office public area and on the Field Office web site during the environmental review process. The web site main page provides a link to projects currently under environmental review.

2. Native American Consultation and Coordination:

The following Native American Tribes were consulted during formulation of the NECO Plan including land use plan level analysis of the Rice Valley Allotment:

- Ft. Mojave Indian reservation, Needles, CA.
- Chemehuevi Indian Reservation, Havasu Lake, CA
- Colorado Indian Tribes Reservation, Parker, AZ
- Quechan Indian Reservation, Yuma, AZ
- Torres-Martinez Band of Mission Indians, Thermal, CA
- Twenty-Nine Palms Band of Mission Indians, Twentynine Palms, CA
- Cabazon Band of Mission Indians, Indio, CA
- Agua Caliente Band of Cahuilla Indians, Palm Springs, CA

3. Coordination with the Lessee (CCC)

8/13/04: The BLM contacted the grazing operator to update on the status of the lease issuance process.

9/04: The BLM contacted the grazing operator to inform him that the grazing lease issuance process has been temporarily suspended due to a court decision vacating and remanding the biological opinion for the NECO plan amendment to the U.S. Fish and Wildlife Service.

2/23/05: The BLM updated the grazing operator on the progress of lease issuance. A new Biological Opinion had not been issued but was expected soon.

4/5/05: The BLM contacted the grazing operator to inform him that a new biological opinion had been issued.

4/24/06: Completed allotment transfer documents were received by the BLM.

CHAPTER 2: PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action

The proposed action is to issue a 10-year fully processed lease in conformance with CDCA Plan and the NECO Plan Amendment as described in this section. The proposed action balances environmental protection with continued use of the allotment for livestock grazing.

1. NECO Provisions Applicable to the Allotment

A 9,254 acre segment in the southwestern portion of the Rice Valley sheep allotment would no longer be available for domestic sheep use because it is less than 9 miles from occupied bighorn range in the Granite and Palen Mountains. After this removal of acreage, the allotment would total 74,740 acres. (see map I)

2. Terms and Conditions Applicable to Allotment:

- a. Turnout shall not occur until the production of 200 pounds (air-dry-weight) per acre of ephemeral forage is available. The lessee shall be required to remove the sheep from the area or the entire allotment if production falls below 200 pounds per acre. The use rate above the forage above the minimum shall be ten percent.
- b. No grazing is authorized except as approved annually by application. All herders shall have a current use authorization in their possession and a copy posted at the camp site. When trailing, all herders shall be required to have a copy of the current trailing authorization.
- c. Sheep bands shall be permitted to 1,000 adult sheep with an approximately equal number of lambs, not to exceed a total of 2,000 animals.
- d. Sheep shall be grazed in a loose or dispersed pattern.
- e. Grazing use shall be limited to one pass per season at a given location. A pass is identified by physical evidence that sheep use has occurred.
- f. Bedding and watering sites shall be changed daily. New bedding or watering sites shall be at least one-quarter mile from any previous sites. Sheep shall be watered on or adjacent to dirt roads (within 25 feet) or in areas that have been previously cleared of shrubs from past use.

- g. The herder will utilize, when ever possible, previously disturbed sites for all bedding and watering locations. Designated recreational camping sites are not to be used as watering or bedding sites.
- h. Stopping and parking of vehicles and vehicular camping along routes of travel would be limited to within 50 feet of all routes in multiple-use Class “L” and “M” as described in the CDCA plan.
- i. No bedding or watering sites are allowed within ¼ mile of any paved road. A herder shall be present when sheep are grazing or otherwise moving within a ¼ mile from any paved road.
- j. A camp site or camp trailer shall not remain in the same location for more than seven days. A new camp location shall be at least one mile from any previous camp location. Trash and garbage shall be removed from each camp site; no trash or garbage shall be buried at a camp site. All sheep carcasses within 300 feet of a road shall be removed or disposed of in compliance with all County and State laws and regulations.
- k. Within 15 days of the close of the authorized grazing period, the lessee/permittee shall submit a map delineating areas of use within the allotment.
- l. The permittee/lessee will have the authority to ensure compliance with protective stipulations for the desert tortoise, ensure that their employees comply with protective stipulations, and be responsible for coordination with the Bureau, the Service, and California Department of Fish and Game. This includes educating field employees concerning the occurrence of the desert tortoise in the grazing areas and the status of the desert tortoise as a threatened specie.
- m. The following are additional terms and conditions to this proposed action:
- n. Grazing of perennials including but not limited to galleta grass, white bursage, or desert lily shall not be allowed to exceed one-half of the Proper Use Factor (PUF) as outlined in the CDCA Appendix, Volume F. If those levels of perennial use are reached, the ephemeral authorization for that season shall be cancelled and the animals removed.
- o. No motorized vehicles or equipment or mechanical transport would be authorized inside wilderness areas.

- p. No structures, installations, or facilities would be authorized inside wilderness areas.
- q. No more than 2000 sheep would be allowed to be present at any one time inside of wilderness areas.
- r. All herders shall carry copies of maps showing allotment boundaries, wilderness boundaries, and exclusion areas.
- s. A copy of these terms and conditions shall be made available to the herders in Spanish.

3. Other Management Prescriptions

a. Livestock Numbers and Season of Use

Allotment Name	Sheep Number *	AUMs**	Season of Grazing Use***	
			From	To
Rice Valley	Dependent on ephemeral forage availability	Dependent on ephemeral forage availability	March 1	April 30

* The number of livestock authorized to graze during the season of use.

** Animal Unit Month (AUM) the amount of forage necessary for the sustenance of five sheep or its equivalent for a period of 1 month.

*** The period livestock typically graze forage on the allotment. The grazing period of use does not apply (NA) to ephemeral allotments because grazing use would occur when forage is available

4. Livestock Management

The Rice Valley Allotment has been recently transferred to a new lessee. After the new lease is issued, it is the intention of the new lessee to submit grazing applications when ephemeral forage is available as follows:

a. Ephemeral Authorization

For each year that the lessee wishes to graze, he must file a grazing application specifying the desired number of livestock and period of use. Forage production and stocking rates would be determined by BLM for each season that the lessee files an application. When applicable fees are paid, the billing notice becomes the authorization to make a specified amount of grazing use.

b. Ephemeral Measurement and Stocking Rate Establishment

Sheep would only be turned out when there is 200 lbs. per acre or more of ephemeral forage. BLM would measure ephemeral forage production by the comparative yield sampling method. BLM range staff would establish three to five plots distributed throughout the allotment sufficient to sample ephemeral forage on the allotment. Each plot would consist of five randomly thrown one-meter quadrats to obtain an ocular estimation of ephemeral forage density rankings, from lowest density (1) to highest density (5). Either a straight-line or triangular transect would then be run consisting of 100 quadrat estimations (from 1 through 5) of ephemeral forage density based on the five ranked quadrats. Five more quadrats would again be randomly thrown to re-estimate the density rankings to provide adjustments for the transect observations. Ephemeral species from all ten randomly thrown quadrats would then be individually clipped, bagged, and weighed. The bags would again be weighed after drying to determine dry weight. The survey data from each plot would then be analyzed in a linear regression to determine pounds per acre of ephemeral forage.

Per the CDCA, sheep stocking rates would be calculated as five sheep being equal to one Animal Unit Month (AUM). Based on past use, in a typical ephemeral grazing season, there would be from 2000 to 3000 sheep on the allotment depending upon ephemeral forage availability. The actual grazing use data including turnout and take off dates, AUM's utilized, and areas of use would be provided to BLM by the permittee no later than fifteen days after the end of the current use period. If the initial forage estimation is below 300 lbs. per acre, BLM would monitor ephemeral forage production throughout the grazing period. Sheep would be removed if ephemeral forage drops below the 200 lb. per acre threshold.

c. Sheep Handling and Herding

Sheep herding within the allotment would include motorized travel on designated open routes, operation and maintenance of portable living quarters, hauling of water by trucks, and periodic gathering of sheep. No natural water sources occur on the allotment. All watering of sheep would be provided by both water available in the forage itself and by water trucks. Sheep should be herded by the "open" herding method where the herders guide the lead animals (rather than from behind) and avoid excessive use of dogs, resulting in a looser grouping of the herd. Since portions of the allotment lie within designated wilderness, no motorized or mechanized travel or equipment would be used within wilderness boundaries.

5. Range Improvements

There are no existing or proposed range improvements for the Rice Valley Allotment.

6. Monitoring Ephemeral Production

2005: Ephemeral production met the 200 lb/acre threshold requirement in the entire allotment. Forage analysis was over 3900 lb/acre

7. Terms and Conditions

a. General

- i. Submission of actual use reports would be required within 15 days after the end of the grazing authorization. Actual use reports would be required to provide detailed location and number of livestock.
- ii. Implementation of regional standards for public land health and guidelines for grazing management as shown in the NECO Plan cannot occur until the Secretary of the Interior approves them. Until that time, the nationally developed fallback standards and guidelines would continue as the basis for public land health.

b. Health and Safety.

- i. Grazing leases will be managed in compliance with Department of Interior policies (i.e. DOI Manual 485, Chapter 23, Public Safety and Health; <http://elips.doi.gov>), Riverside County Environmental Health, California Occupational Safety and Health Administration, and other Federal, State, and Local agencies having jurisdiction in these areas.
- ii. Unsafe conditions shall be mitigated as soon as practicable; interim abatement measures will be made immediately upon identification of a condition that may impact the public safety and health and the abatement measures will be implemented within 30 days of identification of the hazardous condition.
- iii. Grazing lessee will provide annually at the end of the grazing interval a report summarizing injuries and illnesses and unsafe conditions identified and/or abated and will comply with 29CFR1910.1904, as applies.

c. Solid and Hazardous Materials

- i. The grazing lessee will comply with solid and hazardous material-related Federal, State, and local Environmental Regulations and directions. The grazing lessee has the responsibility of preventing and mitigating damage to the soil, air, and water resulting from his operations. Hazardous materials with a potential to spill shall be stored in secondary containment, spill media shall be on-land to immediately remediate a spill. The grazing lessee will be subject to periodic, formal, or informal review of hazardous and solid waste material disposal procedures. The grazing lessee will be able to demonstrate documentation of proper disposal of solid and hazardous wastes produced as a result of typical operations at the request of BLM, State, or Local Authorities.
- ii. The grazing lessee will report, immediately, to the Federal Interagency Communications Center (FICC) at (909) 383-5652, releases of any material not authorized (such as waste oil). An initial Report will be faxed to the authorized officer within 24 hours of the incident's discovery (760) 251-4899. Incidents which occur during non-office hours must be faxed to the FICC concurrently at (909) 383-5587.

B. No Action (Current Management) Alternative

This alternative authorizes grazing under the same lease that existed before expiration and subsequent renewal under Public Law 106-113. This alternative is identical to the proposed action except that the 9,254 acre segment in the southwestern portion of the allotment would not be removed from grazing. The total acreage available for grazing in this allotment would remain the same at **85,565 acres**.

C. Alternatives Considered But Not Analyzed.

No Grazing Alternative: No issues were identified in the NECO Plan that would necessitate making all of the Rice Valley Allotment unavailable to grazing.

CHAPTER 3: ENVIRONMENTAL ANALYSIS

A. Critical Elements

The following table summarizes potential impacts to various elements of the human environment, including the "critical elements" listed in BLM Manual H-1790-1, Appendix 5, as amended. Elements for which there are no impacts will not be discussed further in this document.

Environmental Element	Proposed Action	No Action Alternative
Air Quality	See discussion	See discussion
ACEC's	Not present	Not present
Cultural Resources	See discussion	See discussion
Native American Concerns	See discussion	See discussion
Farmlands	Not present	Not present
Floodplains	Not affected	Not affected
Energy (E.O. 13212)	Not present	Not present
Minerals	Not affected	Not affected
T&E Animal Species	See discussion	See discussion
T&E Plant Species	See discussion	See discussion
Invasive, Nonnative Species	See discussion	See discussion
Wastes (hazardous/solid)	See discussion	See discussion
Water Quality (surface and ground)	See discussion	See discussion
Wetlands/Riparian Zones	Not present	Not present
Wild and Scenic Rivers	Not present	Not present
Wilderness	See discussion	See discussion
Environmental Justice	See discussion	See discussion
Health and Safety Risks to Children	See discussion	See discussion
Visual Resource Mgmt.	See discussion	See discussion

B. Impacts

1. AIR QUALITY

Affected Environment:

The Mohave Desert Air Quality Management District (MDAQMD) has state air quality jurisdiction over the area associated with the proposed action. The MDAQMD has rules that apply to this project along with permitting requirements. Much of the time, air quality throughout the project area is generally good. There are, however, times that the area does not

meet air quality standards due to locally generated and/or wind transported pollutants. The vicinity in which all subject grazing allotments are located is currently classified as a federal non-attainment area for ozone and particulate matter less than 10 microns in diameter (PM-10) under national standards. The area is within the Mojave Desert PM-10 Planning Area and the South East Desert Ozone non-attainment area. The State Implementation Plan (SIP) identifies sources of PM-10 emissions and control measures to reduce emissions. The SIP emphasizes controls and management.

Environmental Consequences:

a. Impacts of Proposed Action Alternative

Soil disturbance from the trampling action of the livestock when soil moisture levels are low would result in increased fugitive dust emissions (PM10) in the allotment. In addition, vehicles used in association with livestock operations on the access roads would also generate small additional amounts of PM10 emissions and various precursor emissions for ozone.

However, the overall effect on air quality would be slight due to the generally wide distribution of livestock movement patterns in the allotment. Occasionally, livestock will be concentrated in temporary holding areas for short periods off the allotment. Emissions would be higher during potential holding periods, but would not likely exceed standards. PM-10 and ozone emissions within this allotment are de minimis and no further conformity determination is required.

b. Impacts of No Action Alternative.

Same as for the Proposed Action Alternative except that grazing would be dispersed over an additional 9,254 acres resulting in a very slight decrease in PM10 emissions. Overall soil disturbance and resultant PM10 emissions would potentially be less as livestock use patterns are distributed over a wider area.

c. Cumulative Impacts

The slight increase in PM10 emissions resulting from grazing would make a very small contribution to overall PM10 levels in the general area. Sources of PM10 particles in the area include vehicles being driven on unsurfaced roads and areas devoid of vegetative cover and subject to wind erosion.

Consultation:

Consultation with Mojave Desert Air Quality Management District was not undertaken as

emissions are expected to be de minimis and air quality is not expected to be impacted.

Maps:

None

References:

None

2. CULTURAL RESOURCES

Affected Environment

Rice Valley consists of a shallow basin: the lowest point in the valley, approximately 670 feet amsl, occurs in the east central portion of the allotment. The highest elevations within the allotment occur along its southern and western edges. The highest point in the allotment is approximately 1475 feet amsl. Sand sheets and sand dunes cover much of the valley floor. From the northwest and moving clockwise, the following mountain ranges surround the valley: Arica Mountains, West Riverside Mountains, Big Maria Mountains, and Little Maria Mountains.

Vegetation includes Creosote (*Larrea tridentata*), cheesebush (*Hymenoclea salsola*), and white bursage (*Ambrosia dumosa*). The desert dry wash woodlands contain ironwood (*Olneya testata*), and blue paloverde (*Cercidium floridum*). The dominant perennial grass species is galleta grass (*Hilaria jamesii*). Galleta grass and the exotic schismus grasses (*Schismus barbatus* and *Schismus arabicus*) provide ephemeral forage.

There are no natural permanent water sources within the allotment. A small tank located west of Gypsum Well may occasionally hold water, but was dry when visited in the winter of 2001-2002.

While Rice Valley does form a shallow basin, there is no evidence that it formed a lake during wetter climatic periods. Research conducted on the nearby Bristol/Cadiz/Danby Dry Lakes system concluded that these lakes would have been “relatively shallow and short-lived” (Gallegos et al 1980:30) and would have required a significant increase in rainfall over modern values. This system draws from a larger catchment area than Rice and features playas and other evidence of lake formation. It is unlikely that a significant body of water was ever present in Rice Valley.

Given the lack of permanent water prehistoric or ethnographic occupation of Rice Valley would have been unlikely. The only evidence for prehistoric occupation or use of the Rice Valley Grazing Allotment is found in three sites: CA-RIV-1499, CA-RIV-3604, and CA-RIV-4123. All three sites contain ceramics and represent Late Prehistoric Period use of the area. A fourth site, CA-RIV-160T, is reported to be present at the southeastern edge of Rice Valley. However, the

site form indicates that the trail was not actually present at the mapped location but inferred from other sources. The pottery sites may be associated with trails which crossed the valley: although RIV-160T could not be identified in the field, its mapped location leads east to a pass between the Riverside and Big Maria Mountains. Trail segments are also associated with a site which lies west of the grazing allotment and provides a route through the Little Maria Mountains. Prehistoric sites within the grazing allotment are likely to be limited to trail segments and pottery scatters (or “pot drops”). Sites containing lithic debitage or other evidence of stone tool manufacture may but are not likely to be present. Lithic resources suitable for tool manufacture are not known to occur within the allotment.

A literature review was conducted using Palm Springs-South Coast Field Office files, including CHRIS data and GLO maps. No roads, structures, or other man-made features appear on GLO maps from Henry Washington’s 1854-1856 surveys. USGS 15’ series maps from the 1950’s indicate that a road had been established between Midland and Rice and a branch of the Atchison, Topeka, and Santa Fe Railroad also ran through the area. These maps also identify wells, mining sites, Rice townsite, and the Rice Air Base. The mines are clustered in the Arica Mountains. Brown’s Well and Gypsum Well are located adjacent to the main Midland-Rice road; Priest’s Well is located adjacent to a mine access road. Rice and Rice Air Base are located outside the boundary of the allotment

Historic period use of the area began with mining in the late 1890’s. Mining for gold, fluorite, silver, and gypsum appears to have peaked in the mid 1900’s. A guide to desert watering holes developed in 1923 by John S. Brown provides a mile by mile account of historic development in Rice Valley. According to Brown a “bad but passable road” connected Blythe and Rice. The area was uninhabited except for the community of Rice and a few mining camps. Brown’s (1923) description of the route through Rice Valley confirms the presence of multiple roads, mines, and wells in the area but no towns or settlements. Again, the lack of readily-available permanent water prevented substantial occupation of the area.

Mineral extraction in and around Rice Valley also included tungsten, manganese, and lead/silver/zinc mines. Very few mines continued in operation after the 1950’s.

The California Southern Railroad constructed a line from Cadiz, California to Matthie, Arizona in 1910. Rice was originally referred to as Blythe Junction since it provided the nearest rail access for the town of Blythe. By 1914 Rice had established a reputation as a lawless railroad town in the middle of the desert. The rail branch from Rice to Blythe was begun in 1915 and completed in 1916.

Construction of the Colorado River Aqueduct in the 1930’s brought an influx of workers to the Rice area. The Aqueduct is located north of the grazing allotment and roughly parallels State Highway 62.

During World War II much of the Colorado Desert became a training/testing ground for men and equipment. Maj. Gen. George S. Patton, Jr. recognized the need to train troops in conditions

similar to those they would face in North Africa. Camp Rice, a divisional camp, was established in 1942, adjacent to the Rice Army Air Field. Camp Rice is located on lands managed by the Bureau of Land Management and has been recommended as eligible for listing on the National Register of Historic Places (NRHP). Camp Rice is located adjacent to but outside of the grazing allotment.

Approximately 735 acres of block surveys have been completed in Rice Valley. In the late 1970's Class II sample surveys were completed throughout the California Desert District (Warren 1981). Nine sample units one mile in length and 1/8 mile in width were intensively surveyed within the Rice Valley Grazing Allotment (BLM 1978). A 15 acre area was inventoried for a proposed uranium exploration project (Lippincott). In addition three linear cultural resources inventories have been completed. Two of these (Plog et al 1989, Purcell et al 2001) paralleled the Midland-Rice road for most of its length. The third (Wilke 1983) cuts across the allotment roughly from east to west. A total of 14 archaeological sites have been previously recorded in the allotment. These include two historic period well sites, several historic roads, the historic Atchison, Topeka, and Santa Fe railroad, three prehistoric pottery scatters, and a prehistoric trail segment. In 2002 the BLM archaeologist, Wanda Raschkow, examined a natural tank for cultural resources and a historic mine at that location was recorded.

Raschkow (2006) completed a Class I records search and conducted reconnaissance level inventory within the allotment in keeping with the procedures stipulated by the Grazing Amendment to the Revised State Protocol Agreement (2004). Raschkow assessed the condition of the historic roads and well sites and identified a third historic well. No impacts from sheep grazing were noted at these locations. Raschkow also examined two gravel pits that have been previously used for sheep watering locations. Surface disturbance was minimal; no historic properties were present. Two transect surveys were conducted perpendicular to the Midland-Rice road in areas that had not been previously inventoried. The purpose was to assess the potential for significant cultural resources to occur along the northern segment of the Midland-Rice road. A single small site consisting of C-ration cans and shell casings from WWII was identified.

There are no natural water sources and no range improvements present within the allotment. Sheep grazing use on the allotment will be dispersed; congregation of sheep is expected to occur only where watering trucks are located and where sheep are loaded and unloaded. Sheep shall be watered on or adjacent to dirt roads (within 25 feet).

Environmental Consequences:

Domestic Livestock Grazing Impacts on Cultural Resources

Experimental studies designed to address the impacts of domestic livestock grazing on archaeological resources have demonstrated that intensive trampling may have an adverse effect (ASPNN 1990: Osborn et al. 1987; Roney 1977; and Nielson 1991). Intensive trampling may result in artifact breakage and disruption of features, stratigraphy, and spatial patterning of archaeological materials. Removal of vegetation or loosening of surface soils may lead to

erosion.

Halford (1999:np) notes: “Intensity of grazing , soil hardness, moisture, vegetation cover, and type are factors influencing the level and types of impacts. The areas of greatest concern are those locations where livestock congregate and tend to spend a large percentage of their time. In zones where livestock are more dispersed, such as upland locations, it can be predicted that impacts will be mainly surficial, causing no stratigraphic mixing, but perhaps resulting in horizontal displacement of artifacts. In rock areas and zones without sufficient feed very little to no cattle impact is expected to occur (field observations 1999).”

The above research focused on the effects from cattle in locations of intensive grazing. The effects from sheep in the Rice Valley Grazing allotment could be expected to be similar but less severe due to the lower weight of the animals and the dispersed or “open” herding techniques in use. As a result, impacts from sheep grazing in Rice Valley are expected to be limited to the areas where the animals congregate: watering and loading/unloading sites.

a. Impacts of Proposed Action Alternative

Historically the herders have used disturbed areas, such as gravel pits, adjacent to Midland-Rice road for watering and loading/unloading the sheep. Fifteen miles of the Midland Rice road fall within the grazing allotment and 8.5 miles of Class III cultural resources inventory have been completed adjacent to and generally east of the road. No historic properties were identified as a result of these inventories and the inventory results indicate that there is little potential for historic properties to occur within the road corridor. A number of isolated historic artifacts (primarily tin cans and glass fragments), the remains of a 1920’s or 1930’s automobile, and a small pottery scatter were recorded. The pottery sherds were collected and removed when the site was recorded. Two transect surveys oriented perpendicular to Midland road confirmed that the road corridor had little potential to contain historic properties. None of the cultural resources recorded adjacent to the Midland road are eligible for listing on the NRHP.

Examination of two gravel pits that have been previously used for sheep watering locations revealed minimal surface disturbance. No historic properties were present.

Two sites within or adjacent to the allotment have been recommended as eligible for listing on the National Register. Rice Camp, a WWII Desert Training Center divisional camp, is located at the northeastern edge of the allotment. The allotment was previously modified so that the area of Rice Camp is excluded and effects to the site will be avoided. The Atchison, Topeka, and Santa Fe railroad runs through Rice Valley and is in continuing use as a functioning rail line. Sheep grazing does not have the potential to affect the historic values of the railroad.

The remaining sites in the Rice Valley Grazing Allotment are located in open range. No impacts to these sites are known or expected. The lessee/permittee will submit a map delineating areas of use within the allotment within 15 days of the authorized grazing period. Watering and bedding locations will be monitored and/or inventoried for cultural resources and effects. If impacts to cultural resources are identified in the future one or more of the treatment measures outlined in the Grazing Amendment to the 2004 State Protocol Agreement will be applied.

Issuance of the proposed sheep grazing lease for the Rice Valley Allotment will have no effect to historic properties.

b. Impacts of No Action (Current Management).

The potential for impacts to cultural resources with the No Action alternative would remain the same as the Preferred Action. The additional 9,254 acres not removed from the allotment would be open range: no impacts to cultural resources are known to have occurred or are expected to occur. No historic properties have been identified within the additional acreage. The No Action Alternative will have no effect to historic properties.

c. Cumulative Impacts

The potential impacts resulting from grazing would add to other on-going impacts in the vicinity associated with general vehicle use, erosion, and illegal collecting. Overall, the incremental increase in potential impacts associated with grazing would not be significant.

Maps

Maps identifying the locations of cultural resources are not included due to the proprietary nature of the information.

References

ASPPN

- 1990 Impacts of Domestic Livestock Grazing on Archaeological Resources Archaeological sites Protection and Preservation Notebook, Technical Notes I-15. U.S. Army Engineer Waterways Experiment Station, Vicksburg MS.

Bischoff, Matt C.

- 2000 The Desert Training Center/California Arizona Maneuver Area, 1942-1944: Historical and Archaeological Contexts. Technical Series #75, Statistical Research, Inc.

Brown, John S.

- 1923 "The Salton Sea Region, California: a Geographic, Geologic, and Hydrologic Reconnaissance with a Guide to Desert Watering Places." Water Supply Paper No. 497,

United States Geological Survey

Bureau of Land Management

1978 California Desert Program: Archaeological Sample Unit Records for the Big Maria Planning Unit. Document on File Palm Springs-South Coast Field Office.

Gallegos, Dennis, John Cook, Emma Lou Davis, Gary Lowe, Frank Norris, and Jay Thesken
1980 Cultural Resources Inventory of the Central Mojave and Colorado Desert Regions, California. BLM Cultural Resources Publications. Prepared by WESTEC Services, Inc.

Halford, F. Kirk

1999 A Research Design for the Bishop Field Office Grazing Allotment Lease Renewal Assessments. Cultural Resource Project: CA-170-99-04. On file at the Department of the Interior, Bureau of Land Management, Bishop Field Office, Bishop, CA.

2003 Affected Environment. In: Environmental Assessment, Livestock Grazing Authorization. Department of the Interior, Bureau of Land Management, Bishop Field Office, Bishop, CA.

Lippincott, Kerry

A Cultural Resources Survey of Two Proposed Uranium Exploration Sites in Rice Valley, Riverside County, California

Nielsen, Axel E.

1991 Trampling the Archaeological Record: an Experimental Study. *American Antiquity* 56(3):483-503

Osborn, Alan, Susan Vetter, Ralph Hartley, Laurie Walsh, and Jesslyn Brown

1987 Impacts of Domestic Livestock Grazing on the Archaeological Resources of Capitol Reef National Park, Utah. Midwest Archaeological Center Occasional Studies in Anthropology No. 20. National Park Service.

Plog, Fred, Kenneth Topman, and David Carlson

1989 *Cultural Resources Report for the All American Pipeline Project*. New Mexico State University.

Purcell, David E., Meg McDonald, John D. Goodman II, Jenna L. Neves, Daniel K. Newsome, and Adam M. Berg

2001 *The El Paso to Los Angeles Fiber Optic Cable Project: Cultural Resources Survey of the California Segment, Riverside, San Bernardino, and Los Angeles Counties*. Prepared by SWCA, Inc., Environmental Consultants.

Raschkow, Wanda

2006 A Class I Cultural Resources Overview and Reconnaissance Inventory for the Rice

Valley Grazing Allotment. Document on File, PSSCFO, BLM.

Roney, John

1977 Livestock And Lithics: The Effects Of Trampling. Manuscript on file at the Bureau of Land Management, Winnemucca District Office, Winnemucca, NV.

Shumway, Gary L. and Larry Vredenburgh.

1980 Desert Fever: an Overview of Mining in the Southern California Desert Conservation Area. Prepared for the Desert planning Staff, BLM.

Warren, Elizabeth Von Till, Robert H. Crabtree, Claude Warren, Martha Knack, and Richard McCarty

1981 A Cultural Resources Overview of the Colorado Desert Planning Units. Cultural Resources Publication, Bureau of Land Management, Dept. of Interior.

Wilke, Philip J.

1983 *Letter Report. Archaeological Monitoring of a Line Proposed for Seismic Testing for Oil and Gas Exploration.* Prepared by UC Riverside ARU.

3. ENVIRONMENTAL JUSTICE

Affected Environment:

The grazing allotments being analyzed are located in rural Riverside and San Bernardino Counties. The rural areas of these counties are typically occupied by moderate to low-income households. The lessees that hold the grazing leases for the allotment being analyzed typically have moderate incomes.

No minority communities or low-income communities are located within or adjacent to the proposed project area. Further, the proposed action would not impact the Native American's distinct cultural practices or result in disproportionately high or adverse human health or environmental effects on minority communities.

Environmental Consequences:

a. Impacts of Proposed Action Alternative and No Action Alternatives:

The implementation of the proposed action would have an affect but not a disproportionate affect on low-income or minority populations living on or near the allotment being analyzed. Continued grazing in this allotment under both alternatives would have an economic benefit to the leesee and employees. This benefit would have a slight direct and indirect benefit on the local Palo Verde Valley economy during infrequent period of ephemeral grazing.

b. Cumulative Impacts

There are no known cumulative impacts to low-income or minority populations as result of current grazing practices (proposed action).

Consultation:

None

Maps:

None

References:

None

4. HEALTH AND SAFETY

Affected Environment:

Public use of this remote area consists of occasional through traffic on the Midland-Rice Road and low numbers of recreationists engaged in camping and desert touring. The potential for public visitation proximal to grazing operations, electrical generation and utilization, and herding present potential hazards to the public.

The specific language addressing the grazing lessee's due diligence in these areas and that of BLM's responsibility to inspect each allotment for health, safety, and environmental issues in the proposed action (Ch 2 #5 Health and Safety) sufficiently provides for public safety and health.

Environmental Consequences:

a. Impacts of Proposed Action and No Action Alternatives.

The impact of livestock grazing on public health and safety is a very slight increased risk of vehicular accidents if sheep are grazed along traveled roadways. The facilities required for grazing, such as watering areas, are minimal and pose little or no risk to the public.

b. Cumulative Impacts

There are no known cumulative impacts to health and safety associated with this sheep grazing.

Consultation:

None

Maps:

None

References:

Federal Land Policy and Management Act of 1976, Titles I – III. ;
Department of Interior, Part 485, Safety and Occupational Safety & Health Program, Chapter 23
Public Safety and Health.

5. NATIVE AMERICAN CONCERNS

Affected Environment:

The following Native American Tribes were consulted during formulation of the NECO Plan, of which identified the allotment as available for continued domestic sheep use with the exception of 9,254 acres in the southern portion of the allotment because it is less than 9 miles from occupied bighorn range in the Granite and Palen Mountains:

- Ft. Mojave Indian reservation, Needles, CA.
- Chemehuevi Indian Reservation, Havasu Lake, CA
- Colorado Indian Tribes Reservation, Parker, AZ
- Quechan Indian Reservation, Yuma, AZ
- Torres-Martinez Band of Mission Indians, Thermal, CA
- Twenty-Nine Palms Band of Mission Indians, Twentynine Palms, CA
- Cabazon Band of Mission Indians, Indio, CA
- Agua Caliente Band of Cahuilla Indians, Palm Springs, CA

Environmental Consequences:

a. Impacts of Proposed Action and No Action Alternatives.

No impacts were identified associated with continued sheep grazing in this allotment including the 9,254 acres in the southwestern portion of the allotment.

b. Cumulative Impacts

No cumulative impacts were identified during the Native American consultation process.

Consultation:

See above list of tribes consulted.

Map:

None.

References:

None.

6. RECREATION**Affected Environment:**

The Rice Valley Allotment receives light use in the area (primarily on and adjacent to the Rice-Midland road) as there are few recreational opportunities present. Lack of water, sparse vegetation, and mostly level topography present few opportunities for hunting, bird watching, or hiking. However, recreation use increases in this area during wet spring seasons when desert wildflowers are prevalent.

Environmental Consequences:**a. Impacts of Proposed Action and No Action Alternatives.**

Impact of sheep grazing on recreation would not be substantial given the low numbers of recreationists using this area. However, this use increases during wet spring seasons when wildflowers are the most prevalent and sheep grazing is most likely to occur. Grazing may disturb pristine wildflower areas sought by recreationists. However, there would be a positive impact of not grazing the 9,254 acres in the southwestern portion of the allotment as identified in the Proposed Action.

b. Cumulative Impacts

There are no known cumulative impacts to recreation associated with this ephemeral sheep grazing allotment given the low levels of human activity in the general area.

Consultation:

None

Maps:

None

References:

None

7. SOCIAL AND ECONOMIC**Affected Environment:**

The lessee for the Rice Valley allotment lives and operates his sheep operations from Idaho. His bands of sheep winter in alfalfa fields near Blythe, California, and at some point in late winter or early spring, the sheep are removed from these fields in preparation of developing the summer hay crop. The sheep and any portable facilities are then gathered and transported by vehicle to the next grazing location ending with placement in their summer range. Most of the non-winter grazing activities appear to occur out of state. However, when sufficient forage is available on this allotment, grazing use occurs upon request of the lessee.

It is unknown what percentage of the lessee's income is derived from sheep operations or to what degree that percentage of income is maintained by the lessee's dependence on grazing this allotment. It is known that the lessee is engaged in other income-producing activities. The lessee utilizes other individuals, including herders from other countries working on three-year visas, to assist in managing the sheep operations. Local farmers in Blythe realize income from rental of pasture for the lessee's sheep. Other support services such as transport, veterinary, and equipment suppliers realize economic gains related to the lessee's operations.

Overall, the lessee's economic contributions to the economy of eastern Riverside County are relatively small. This region's economy is primarily based upon recreation (especially along the Colorado River), farming, Chuckwalla State Prison, and Interstate 10 related businesses.

Environmental Consequences:**a. Impacts of Proposed Action and No Action Alternatives.**

Under these alternatives grazing would continue at current levels, however, these levels are at their lowest point when compared to historic levels. Because this allotment is so infrequently grazed, these grazing operations would continue to have a nominal influence on the local and regional economy of Eastern Riverside County.

b. Cumulative Impacts

There would be no meaningful, cumulative impacts to the local or regional economies of Riverside and San Bernardino Counties from the implementation of either he

proposed action, or the no action alternative. The past, present, or future contributions of these operations to the local or regional economy would be nominal.

Consultation:

None

Maps:

None

References:

None

8. SOIL

Affected Environment:

No Natural Resource Conservation Service (NRCS) soil surveys cover this allotment; however the prevalent soil types are fine sands that typify Rice Valley. Large areas of the allotment are covered by relatively stable sheets of sand held in place by perennial vegetation, while other areas consist of dunes. Nearer the mountains, the soils become rockier with clay textures present. Periodic flash flooding has produced some soil erosion, particularly along drainages on the upper bajadas. Observed erosion appears to be a typical condition of this arid area and is not aggravated by current grazing practices.

The Rangeland Health Assessment, conducted on May 10, 1999, rated all soils as stable.

Environmental Consequences

a. Impacts of Proposed Action and No Action Alternatives

Due to the occasional nature of ephemeral use of this allotment combined with herding practices prescribed by tortoise mitigations, there is no reason to expect that continued sheep grazing would create any downward trends in soil stability. Localized areas of sand may be displaced by wind as sheep are herded through, but any sand moved is soon replaced by sand blowing from other areas.

b. Cumulative Impacts

The primary impacts to soils on this allotment are low levels of vehicular use on the Midland-Rice Road and several other routes in the area. Little increased erosion has been observed from these activities due to on-going maintenance of the Midland-Rice Road and low levels of vehicular use in the area.

Consultation:

None

Maps:

None

References:**9. WASTE, HAZARDOUS OR SOLID****Affected Environment:**

The BLM has no records of solid waste dumping; reportable spills of fuel or other petroleum products; or the dumping of sheep carcasses associated with sheep grazing in this allotment. .

Environmental Consequences:**a. Impacts of Proposed Action and No Action Alternatives.**

There is potential for grazing-related releases of hazardous and/or solid waste including refuse dumping, dumping of sheep carcasses and/or releases of fuel or other petroleum products from haul and water trucks or other equipment. Resources that may be affected includes soil, and water, including surface and ground water contamination. In addition, there may be an increased risk to the public that may come into contact with any contaminated areas. The terms and conditions identified in (Chapter 2 # 5) Public Health and Safety and the Solid and Hazardous Materials sections of this EA would greatly minimize any potential threat to public health and safety and the environment from any hazardous waste release.

b. Cumulative Impacts:

There is a low potential for hazardous or solid waste contamination from recreation use or the railroad that traverses the area, however, there are no known records of such contamination in the area.

Consultation:

None

Maps:

None

References:

40CFR Part 300, National Oil and Hazardous Substance Pollution Contingency Plan; Federal Land Policy and Management Act of 1976, Titles I – III. ;

10. WATER QUALITY, SURFACE AND GROUND

Affected Environment:

There is no perennial surface water on this allotment. Any temporary surface water in the allotment is the result of intermittent rainfall which can occur in sudden rainfall events resulting in flash flooding. The numerous washes throughout the allotment, supporting a variety of desert wash woodland vegetation, are the result of these temporary surface water flows. The presence of robust phreatophytic plants indicate that ground water is present in portions of the allotment. At least three mining-related water wells are present in the allotment, but they have been abandoned for many years. BLM has no data on the depth or extent of ground water on the allotment.

Environmental Consequences:

a. Impacts of Proposed Action and No Action Alternatives.

Sheep grazing in this allotment coincides with periods of rainfall and the resultant growth of ephemeral vegetation. However, the impacts of sheep on water quality in the area is very low given that any surface water quickly infiltrates into the sandy soil. Since no ground water testing has been done on the allotment, it is not known whether sheep have caused any introduction of pollutants to the ground water. However, it is very unlikely that sheep grazing would cause adverse impacts due to the occasional nature of sheep use, a lack of long term concentrations of sheep in localized areas and the aridity of the allotment.

b. Cumulative Impacts

There is a low potential for water quality issues associated with recreation use or the railroad that traverses the area, however, there are no known records of such contamination in the area.

Consultation:

None

Maps:

None

References:

None

11. WILDERNESS

Affected Environment:

Livestock grazing in wilderness is in conformance with the Wilderness Act of 1964 and the California Desert Protection Act of 1994 (CDPA). Section 4(D)(4) of the Wilderness Act states, “the grazing of livestock, where established prior to the effective date of this Act, shall be permitted to continue subject to such reasonable regulations as are deemed necessary by the Secretary of Agricultural.” Section 103(c) of the CDPA has similar language in reference to livestock as that of the Wilderness Act. The grazing of livestock in BLM wilderness areas is regulated under 43 Code of Federal Regulations (CFR) 6304.25, and guided by BLM manual 8560.15 (G). BLM manual 8560.15 (G) states, “Congressional guidelines regarding “Grazing in National Forest Wilderness Areas,” published in House Report 96-1126, dated June 24, 1980, must be implemented in all BLM-administered wilderness with pre-existing grazing.” These guidelines state, “The maintenance of supporting facilities, existing in an area prior to its classification as wilderness, is permissible in wilderness. Where practical alternatives do not exist, maintenance or other activities may be accomplished through occasional use of motorized equipment.” The grazing of livestock in BLM wilderness areas located in the California Desert is guided by Annex 1 of the management policy *Principles for Wilderness Management in the California Desert*.

A total of 36,116 acres of this allotment was designated as wilderness under The California Desert Protection Act of 1994. These allotment lands amount to 13,675 acres in the Palen-McCoy and 22,491 acres within the Rice Valley Wilderness Areas. While no ephemeral grazing use occurred during the year of designation, the baseline grazing use in wilderness is considered to be that use allowed under the grazing permit terms and conditions in effect at the time of designation. Therefore, the level of grazing use in wilderness may be the numbers of sheep that can be supported by any level of ephemeral forage above 200 lb./ac. in a given ephemeral season.

Both of these wilderness areas provide outstanding opportunities for solitude and primitive recreation. The vast 212,752 acre Palen-McCoy wilderness contains all or parts of five mountain ranges, broad valleys, and extensive wash networks. The 39,383 acre Rice Valley wilderness encompasses much of the sweeping floor of Rice Valley. There are no conflicts between wilderness and grazing improvements as no grazing improvements are associated with this allotment. The lessee and herders have no need to utilize motorized access within the allotment. There are no trails, established destinations or campsites within these areas. Overall, recreation use is low in the portions of the allotment designated as wilderness.

Environmental Consequences:

a. Impacts of Proposed Action Alternative

The herding and grazing of sheep in designated wilderness areas is permitted by Sec. 4(d)(4) of the Wilderness Act and Sec. 103(c) of the CDPA where grazing was established prior to designation of wilderness areas. Since no range improvements or other structures are associated with this allotment in designated wilderness, impacts to naturalness and other wilderness qualities are minimal. While these grazing activities are permitted in designated wilderness, there will be a reduction in solitude and primitive recreation opportunities when sheep and herders are present. Surface impacts from these activities, although short-term in nature, would negatively affect wilderness quality by impacting a pristine and unaltered wilderness environment. Restricting vehicular use, associated with heading, watering, and herder-camps, to access routes outside the wilderness will greatly minimize impacts to wilderness values. Eliminating grazing on 9,254 acres of wilderness lands within the allotment will have a positive impact on wilderness values and experiences within the affected lands.

b. Impacts of No Action Alternative

The impacts on wilderness would be the same as the Proposed Action with the exception that the 9,254 acres of wilderness would not be eliminated from grazing. Wilderness values on these lands would be impacted including naturalness, solitude and opportunities for primitive and unconfined recreation.

c. Cumulative Impacts

The primary cumulative impacts to wilderness quality in the area are from illegal OHV use. Old mines and associated impacts, a county borrow pit, and several structures of unknown origin or purpose are imprints of man that detract from the overall ideals of untrammeled landscapes that wilderness quality depends on.

Consultation:

None

Maps:

See appendix I

References:

The Wilderness Act, 1964

The California Desert Protection Act, 1994

BLM Manual 8560 – Management of Designated Wilderness Areas

12. WILDLIFE HABITAT

Affected Environment:

Wildlife (General)

Common animal species on this allotment include the Mojave fringe-toed lizard (*Uma scoparia*), bobcat (*Felis rufus*), coyote (*Canis latrans*), burro deer (*Odocoileus hemionus crooki*), gray fox (*Urocyon cinereiventris*).

The allotment includes potential habitat for common reptilian species, such as side-blotched lizard (*Uta stansburiana*), zebra-tailed lizard (*Callisaurus draconoides*), leopard lizards (*Gambelia* spp.), rattlesnakes (*Crotalus* spp.), western whiptail (*Cnemidophorus tigris*), desert horned lizard (*Phrynosoma platyrhinos*), and various other snake and lizard species.

The habitat types found in these allotments can contain a wide range of bird species, such as black-throated sparrow (*Amphispiza bilineata*), common raven (*Corvus corax*), white-crowned sparrow (*Zonotrichia leucophrys*), Brewer's sparrow (*Spizella breweri*), red-tailed hawk (*Buteo jamaicensis*), Western kingbird (*Tyrannus verticalis*), black-tailed gnatcatcher (*Polioptila melanura*), blue-gray gnatcatcher (*Polioptila caerulea*), phainopepla (*Phainopepla nitens*), northern mockingbird (*Mimus polyglottos*), Gambel's quail (*Lophortyx gambelii*), American kestrel (*Falco sparverius*), turkey vulture (*Cathartes aura*), verdin (*Auriparus flaviceps*), mourning dove (*Zenaidura macroura*), lesser nighthawk (*Chordeiles acutipennis*), horned lark (*Ermophila alpestris*), Poorwill (*Phalaenoptilus nuttallii*), rock wren (*Salpinctes obsoletus*), canyon wren (*Catherpes mexicanus*), Anna's hummingbird (*Calypte anna*), Costa's hummingbird (*Calypte costae*), and house finch (*Carpodacus mexicanus*). Habitat for burrowing owls (*Athene cunicularia*), which is a BLM sensitive species, may also occur within the proposed allotments.

Threatened and Endangered Species:

The desert tortoise (*Gopherus agassizi*) was listed as a threatened species in 1990. The U.S. Fish and Wildlife Service designated the area within the allotment as being within the Northern Colorado Recovery Unit for the Mojave population of the desert tortoise. The allotment is not located in any critical tortoise habitat nor in any proposed Desert Wildlife Management Areas. The allotment is identified in NECO as category III habitat as portions of the area are potential habitat or occupied in low numbers.

Sensitive Species

Desert bighorn sheep (*Ovis canadensis nelsoni*) is designated as a BLM sensitive species. Bighorn sheep typically occupy steep, mountainous, open terrain, although migration between mountain ranges through valleys has been documented (Bleich et al. 1990). The following mountain ranges that provide habitat for bighorn sheep are near or adjacent to the allotment: Turtles, Granites, Palen, Little Marias, Big Marias, Aricas, Riversides, and West Riversides.

Currently, only the Granite and Turtle Mountains contain bighorn sheep. Historically, the Little Maria, Big Maria, and Riverside Mountains contained herds of bighorn sheep, but they are now absent. The California Department of Fish & Game intends to eventually restock these three ranges, although no timeframe has yet been established for this project which was analyzed by the NECO planning effort.

Bighorn sheep in the Granite and Palen Mountains are part of the Southern Mojave Metapopulation. Bighorn sheep have the capacity to use Rice Valley when crossing from one range to another and for food and cover. Barriers to sheep and parasite movement from the occupied mountain habitats into Rice Valley are minimal. State Highway 62, a railroad line and the Colorado River Aqueduct form barriers to movement on the north side of the allotment. No major physical barriers exist between the Granite and Palen Mountains and the allotment. Areas within a few hundred yards of the slopes are particularly susceptible to bighorn sheep use. A habitat management plan for the Granite and Palen Mountains has never been prepared.

Environmental Consequences:

a. Impacts of Proposed Action

Grazing of domestic sheep could negatively impact wildlife in several ways. The domestic sheep consume forage (particularly *Plantago* and *Schismus*) that other herbivores eat, including desert tortoise and bighorn sheep. The domestic sheep may trample small animals, such as juvenile tortoises, lizards, or rodents and their burrows. The presence of sheep and herders in an area may disturb wildlife and deter their use of the area. Sheep may compact soil, making vegetation growth and burrow construction more difficult.

The Desert Tortoise Recovery Plan (1994) provides a thorough discussion of the impacts of livestock grazing to desert tortoise and their habitat:

“Sheep...can affect desert tortoises and their habitat directly or indirectly. The degree of impact depends on...resiliency of soil and vegetation, stocking rates, and season of use. (Sheep) can trample, injure, or kill desert tortoises either above ground or while in burrows. (Sheep) can also trample burrows and other cover sites. Juvenile tortoise burrows are particularly vulnerable to trampling because of their locations and the shallow soil protecting the tunnels. (Sheep) can also trample shrubs (e.g., creosote) used as sites for tortoise burrows and pallets, and which provide protection from predators and temperature extremes. (Sheep) grazing can affect the quality and quantity of plant foods available for desert tortoises, and thereby affect nutritional intake. In some areas, (sheep) preferences are clearly for native plants over weedy non-

natives. The most substantial impacts to vegetation, soils, and desert tortoises likely occur at and in the vicinity of heavy-use sites where sheep are watered, bedded down, or trailed. Loss of cover can increase vulnerability of desert tortoises to predation.” (Fish & Wildlife Service, 1994)

As outlined above, the primary effects of domestic sheep grazing on desert tortoise are soil compaction, removal of forage and cover, and direct mortality through trampling. Improperly high stocking rates and long seasons of use can exacerbate these impacts. By consistently applying the terms and conditions from the proposed action, negative impacts to tortoise are greatly reduced. Limiting bands to 1,000 adult sheep, allowing only one pass through an area per season, grazing in loose patterns, and changing bedding and watering sites daily ensures that impacts to tortoise habitat in any one area are not sustained and allowed to cause significant damage to tortoise habitat. Monitoring the use of perennial plants by sheep will ensure that the grazing season does not last beyond the proper season of use as indicated by sheep switching from ephemeral to perennial forage.

Since this allotment has been lightly used (approximately five months in the last ten years), impacts to tortoise habitat have been very light. The lack of past monitoring data coupled with the difficulty of predicting levels of use for any one year over the long term on an ephemeral allotment makes prediction of the precise impacts of the proposed action difficult. As documented in the Rangeland Health Assessment, the current condition of desert tortoise habitat is acceptable. The impacts to tortoise habitat resulting from future ephemeral grazing seasons should be monitored to determine the effectiveness of the proposed action’s terms and conditions in ensuring that there are no significant adverse impacts to desert tortoise habitat.

Eliminating all portions of the allotment located less than 9 miles from occupied bighorn sheep range in the Granite and Palen Mountains will substantially reduce impacts of domestic sheep grazing on bighorn sheep. Disease transmission from domestic sheep to bighorn sheep has long been recognized as one of the threats to the persistence and restoration of bighorn sheep populations. Bighorn sheep die-offs from *Pasteurella pneumonia* and scabies have been well documented following contact with domestic sheep. This disease transmission is known to occur when bighorn sheep, especially males, move into domestic sheep herds or when domestic sheep stray into occupied bighorn sheep habitat. As a result, the BLM issued the “Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitats” (Instruction Memorandum No. 98-140, dated July 10, 1998) that identified buffer strips, up to nine miles wide, between domestic and bighorn sheep as a means of reducing this disease transmission threat. Therefore, with this buffer and the fact of no surface water present for potential interaction, the impacts of ephemeral sheep grazing in Rice Valley are not anticipated.

b. Impacts of No Action Alternative

Impacts are similar as the Proposed Action with the exception the potential is greater for impacts to bighorn sheep as there would be no reduction in allotment size to accommodate the 9 mile protective buffer between domestic and bighorn sheep.

c. Cumulative Impacts

Desert Tortoise:

The BLM's multiple use mission typically results in a variety of activities that are authorized to occur on the same lands. Other activities that may overlap grazing allotments include utility corridors (including electrical towers and natural gas pipelines), general recreation (i.e. hunting, picnicking, camping and rock hounding) scientific study, and off-highway vehicle (OHV) activities. These activities may indirectly impact wildlife by degrading vegetation at various intensities, in localized areas, for parking, camping or construction work areas.

Past impacts to the Eastern Colorado Recovery Unit include mining, recreational off-highway vehicle (OHV) use, development, operation and maintenance of utility and energy facilities and corridors (e.g., electricity and natural gas transmission lines), livestock grazing, construction and vehicles use of paved and unimproved roads. Grazing of sheep in the Colorado Desert has occurred continuously since the mid-1800's (Lovich and Bainbridge 1999). Early grazing in the Colorado Desert occurred on public lands and was unrestricted. Consequent overgrazing resulted in adversely impacted habitat for many wildlife species including the desert tortoise. In response to deteriorating conditions of public lands, the Taylor Grazing Act was passed in 1943. Following enactment, open range grazing became restricted to geographical areas allotted to one or more livestock producers based on historical or current grazing. Prior to 1968, the BLM allocated long-term grazing based on perennial forage production. A new grazing rule published on December 7, 1968 authorized BLM field offices in California to modify perennial classified allotments from perennial designation to ephemeral or ephemeral/perennial designation. The listing of the desert tortoise in 1990 and Desert Tortoise (Mojave Population) Recovery Plan (U.S. Fish and Wildlife Service 1994) in combination with the CDCA plan as amended by NECO has led to much greater restrictions on grazing and other activities to aid in the recovery of desert tortoises and their habitat. The modifications and terms and conditions in grazing resulting from the implementation of the NECO plan amendment, as well as a reduction in mining activities have allowed for the commencement of natural recovery of wildlife habitat. However, natural recovery rates of soils and perennial vegetation in desert habitats is very slow (U.S. Fish and Wildlife Service 1994).

Present activities within the Eastern Mojave Recovery Unit include grazing, mineral

exploration, operation and maintenance of utility facilities and corridors, dispersed and permitted recreation (e.g., hunting, picnicking, camping, dual sport events, and rock hounding), scientific study, and OHV activities. These activities impact the recovery unit to varying degrees through degradation and loss of wildlife habitat. However, the CDCA land use plan, as amended by NECO, implemented Standards and Guidelines designed to improve habitat conditions and reduce impacts to the recovery unit from surface disturbing activities such as mining, OHV activities, and maintenance of utility facilities and corridors. Consequently, the impacts to the recovery unit, resulting from present activities would be minimized.

Past, present, and potential future impacts, along with the negative impacts from proposed action, cumulatively impact the Eastern Mojave Recovery Unit to varying degrees. However, the adherence to the provisions of the NECO amendment to the CDCA plan, the 2005 Biological Opinion for the CDCA plan (1-8-04-F-43R) (U.S. Fish and Wildlife Service 2005), and the stipulations of the grazing lease renewal for the Rice Valley Allotments would, to some extent, offset the cumulative impacts to the recovery unit caused by past, present and reasonably foreseeable future activities.

Bighorn Sheep:

The catastrophic results of disease transmission from domestic to bighorn sheep is well documented in bighorn populations throughout the western states. Allowing for a nine mile wide buffer between domestic and bighorn sheep population in the Proposed Action Alternative will partially mitigate this impact by protecting bighorn sheep populations in the Palen and Granite Mountains.

However, not allowing for this nine mile buffer in the No Action Alternative would allow for the potential disease transmission between domestic and bighorn sheep and contribute to the overall range-wide population viability issue. In addition, this threat of disease transmission would add to the other factors that threaten bighorn sheep population viability including habitat fragmentation and disturbance by human activities.

Consultation:

On June 17, 2002, the Service issued a biological opinion addressing the effects on desert tortoise from implementing of the Bureau's California Desert Conservation Area Plan as it has been formally amended since 1980, modified by previous consultations related to grazing in the western Mojave Desert, modified by proposed interim conservation measures, and as proposed to be modified by the Northern and Eastern Mojave Desert Management Plan and the Northern and Eastern Colorado Desert Coordinated Management Plan. The June 17, 2002 biological opinion concluded that implementation of the California Desert Conservation Area Plan, as amended and

proposed for amendment, was not likely to jeopardize the continued existence of the desert tortoise and was not likely to destroy or adversely modify designated critical habitat of the desert tortoise.

On May 27, 2003 the Center for Biological Diversity, the Sierra Club, and the Public Employees for Environmental Responsibility, and Desert Survivors filed a lawsuit in the U.S. District Court, Northern District of California against the Bureau and the Service challenging issuance of the June 17, 2002, biological opinion and implementation of the California Desert Conservation Area Plan (as amended). On June 20, 2003, the American Motorcycle Association District 37, Off-road Business Association, San Diego Off-road Vehicle Association, and Utah Shared Access Alliance filed a lawsuit in U.S. District Court of Utah against the Bureau and the Service for the alleged failure to implement the Recovery Plan for the desert tortoise. The suit was later transferred to the Northern District of California and amended to challenge the biological opinion.

In an August 3, 2004, order, the District Court held that the Service had relied on an invalid regulatory definition of “adverse modification” while analyzing effects to designated critical habitat in the June 17, 2002, biological opinion. The biological opinion was vacated and remanded to the Service with instructions to reissue the biological opinion after applying the appropriate definition of adverse modification, which the District Court defined as “a direct or indirect alteration of critical habitat which appreciably diminishes the value of that habitat for either the survival or recovery of a listed species.”

On March 31, 2005, the USFWS issued its new Biological Opinion for the California Desert Conservation Area Plan [Desert Tortoise] (1-8-04-F-43R). The terms and conditions and reasonable and prudent measures addressing desert tortoise recovery of this BO are incorporated into the proposed action. The Service’s BO concluded that implementation of the CDCA Plan, as modified by NECO, is not likely to jeopardize the continued existence of the desert tortoise and is not likely to destroy or adversely modify the critical habitat of the desert tortoise. The incidental take statement from the BO provides an exemption from the prohibitions against take (only for the incidental take of desert tortoises) for ongoing grazing activities within the NECO planning areas, but it does not extend to specific range improvements that the Bureau may authorize on a case-by-case basis.

Maps: See Appendix I

References:

Avery, H.W. and A.G. Neibergs. 1997 Effects of Cattle Grazing on the Desert Tortoise, *Gopherus agassizii*: Nutritional and Behavioral Interactions. Proceedings: Conservation, Restoration, and Management of Tortoises and Turtles—An International Conference. New York Turtle and Tortoise Society. pp.13-20.

Avery, H. W. 1998. Nutritional ecology of the desert tortoise (*Gopherus agassizii*) in relation to cattle grazing in the Mojave Desert. PhD dissertation, Univ. of Calif. Los Angeles.

Bainbridge, D.A., and R.A. Virginia. 1990. Restoration in the Sonoran desert of California. Restoration and Management Notes 8:3-13.

Berry, K. 1978. Livestock grazing and the desert tortoise. Transactions of the 43rd North American Wildlife and Natural Resources Conference. pp. 505-519.

Berry, K.H. 1996. Summary of the results of long-term study plots for the desert tortoise in California. Letter to Molly Brady, Bureau of Land Management, Riverside, California. Riverside Field Station, U.S. Geological Survey. Riverside, California.

Berry, K.H. 1999. Preliminary report from the 1999 spring survey of the desert tortoise long-term study plot in Chemehuevi Valley and Wash, California. Box Springs Field Station, Western Ecological Research Center, U.S. Geological Survey. Riverside, California.

Bureau of Land Management. 1980. The California Desert Conservation Area Plan. California Desert District. Riverside, California.

Bureau of Land Management. 2002. Proposed Northern and Eastern Colorado Desert Management Plan and Final Environmental Impact Statement. California Desert District, Riverside California.

Bureau of Land Management. 2002. Proposed Northern and Eastern Mojave Desert Management Plan and Final Environmental Impact Statement. California Desert District, Riverside California.

Bureau of Land Management. July 10, 1998. Instruction Memorandum No, 98-140: Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitats.

Evans, R.D., and J.R. Ehleringer. 1993. Broken nitrogen cycles in arid lands: Evidence from ¹⁵N of soils. Oecologia 94: 314-317.

Garrett, K. and J. Dunn. 1981. Birds of Southern California, Status and Distribution. Los Angeles Audubon Society, Los Angeles, CA.

Goguen, C.B., and N.E. Mathews. 2000. Brown-headed cowbird behavior and movements in relation to livestock grazing. Ecological Applications 11:1533-1544.

Jessup, David A. 1985. Diseases of Domestic Livestock Which Threaten Bighorn Sheep Populations. Desert Bighorn Council Transactions, 1985, pages 29-33.

Johnson, R. and Belnap, J. 1996. Soil biota changes along a disturbance gradient: Impacts on vegetation composition and prospects for restoration. Proceedings of the Desert Tortoise

Council Symposium, Vol. 1996: 29-31.

Jones & Stokes. 2003. Final report for Southwestern Willow Flycatcher and Least Bell's Vireo Surveys in the Mojave desert. January. (J&S 02-183). Sacramento, CA.

Lovich, J.E., and D.A. Bainbridge. 1999. Anthropogenic degradation of the southern California desert ecosystem and prospects for natural recovery and restoration. *Environmental Management* 24:309-326.

Oftedal, O. 2002. The nutritional ecology of the desert tortoise in the Mojave and Sonoran Deserts. Pages 194-241 in Van Devender, T. R. *The Sonoran Desert Tortoise. Natural history, Biology and Conservation*. Univ. of Arizona Press, Tucson, AZ.

U.S. Fish and Wildlife Service. 1994. Desert Tortoise (Mojave Population) Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 73 pp.

U.S. Fish and Wildlife Service. 1994. Biological Opinion for the Bureau of Land Management's interim livestock grazing program in Mojave desert tortoise critical habitat (1-5-94-F-107). Memorandum from Regional Director, Region 1 to State Director, Bureau of Land Management, Sacramento, California. Dated April 20. Portland, Oregon.

U.S. Fish and Wildlife Service. 1994. Biological Opinion for Cattle Grazing on 25 Allotments in the Mojave Desert, San Bernardino Counties, California (1-8-94-F-17). Memorandum from Field Supervisor, Ecological Services Ventura Field Office to State Director, Bureau of Land Management, Sacramento, California. Dated March 14. Ventura, California.

U.S. Fish and Wildlife Service. 2002. Final Recovery Plan Southwestern Willow Flycatcher (*Empidonax traillii extimus*). U.S. Fish and Wildlife Service, Albuquerque, New Mexico, 60 pp.

U.S. Fish and Wildlife Service. May, 2003. Draft Recovery Plan for the Sierra Nevada Bighorn Sheep (*Ovis canadensis californiana*).

U.S. Fish and Wildlife Service. 2005. Biological Opinion for the California Desert Conservation Area Plan [Desert Tortoise] (1-8-04-F-43R). Memorandum from the Field Supervisor, Ventura Fish and Wildlife Office to State Director, Bureau of Land Management, Sacramento, California. Dated March 31, 2005. Ventura, California.

Wehausen, J.D. and M.C. Hansen. 1986. Unpublished report, California Department of Fish and Game, Sacramento, California.

13. VEGETATION INCLUDING INVASIVE/NON-NATIVE SPECIES

Affected Environment:

This allotment is within the vague boundary between the lower Colorado subdivision of the Sonoran Desert and the Mojave Desert. Dominant ephemeral species are woolly plantain (*Plantago patagonica*) and *Schismus barbatus*, which are the primary ephemeral forage species. The dominant woody species include creosotebush (*Larrea tridentata*), ironwood (*Olneya tesota*), and blue paloverde (*Cercidium floridum*). The dominant perennial grass species is galleta grass (*Hilaria jamesii*). Shrub species include cheesebush (*Hymenoclea salsola*), *Euphorbia polycarpa*, *Palafoxia arida*, *Atriplex polycarpa*, and white bursage (*Ambrosia dumosa*). Vegetative trend data for this allotment is sparse. Due to the lack of any large disturbances in the area and two seasons of grazing in the last fifteen years, downward vegetative trends are unlikely. There are no known threatened or endangered plants on this allotment.

Most of the Rice Valley allotment contains varying densities of schismus (*Schismus barbatus* and *Schismus arabicus*). These ephemeral exotic grasses are native to the Mediterranean and Arabian regions and are present in many arid sites throughout the southwest. While these grasses favor disturbance, they also appear to have invaded many areas that have not experienced disturbance, such as nearby areas of desert pavement. These grasses are listed as invasive weeds by the California Exotic Pest Plant Council.

Environmental Consequences:

a. Impacts of Proposed Action and the No Action Alternatives.

It is undetermined how much grazing practices contribute to the introduction and/or spread of non-native invasive species. It is possible that livestock can spread of invasive species through seeds sticking to their hide, or deposition of seed through their digestive system. Improper grazing practices reduce the diversity, and reproductive abilities of native, desert plant communities. This, in turn, promotes the establishment and spread of non-native invasive species that now occupy habitat once inhabited by native species. Grazing practices that allow for periodic recruitment opportunities commonly have lower densities of non-native species and are more compatible with sustaining native plant communities.

Overall, the current densities of non-native invasive species on the allotments being analyzed in this document are considered moderate. Annual fluctuations in densities are directly influenced by the amounts of late winter, early spring precipitation.

Implementation of the proposed terms and conditions, including Standards and Guidelines and biological opinion stipulations, along with grazing strategies that require proper sheep distribution and the long periods of no grazing years would aid in sustaining native plant communities, and would ensure that sheep grazing would

have only a slight risk of introducing and/or spreading non-native/ invasive species on the Rice Valley Allotment.

In an interview with a shepherd on this allotment during the 1992 grazing season, the shepherd stated that the sheep had been consuming *Schismus* almost exclusively. This along with woolly plantain, constitute the primary ephemeral forage species on this allotment. *Schismus* is an exotic grass and an invader. Despite this, it does provide good forage during active growth for not only sheep, but desert tortoise as well. This grass is not considered noxious and does well under grazing pressure due to its invasive nature. Under past grazing management, it does not appear that this species is substantially competing with any native species. This is likely due to the extreme aridity of the area and the short term, occasional nature of surface disturbance from ephemeral grazing. Woolly plantain, also highly important for sheep and desert tortoise, continues to be present in good quantities during ephemeral years.

Use monitoring in 1992 documented sheep grazing on the perennial desert lily (*Hesperocallis undulata*). Some plants were clipped entirely, some were partially eaten with evidence of regrowth, and many were ungrazed. Although this is an ephemeral allotment, domestic sheep clearly have a preference for this perennial. The extent to which this species has been affected is unclear, although desert lily is observed to thrive in the area. During future grazing seasons, the level of use of this plant and other perennials needs to be closely monitored and documented. Utilization of perennial plants does not normally begin to occur unless the ephemeral season lasts late into the year, i.e. May. Since the permitted use would be only for the ephemeral component, any utilization of perennial species should be monitored and limited. Grazing of perennials such as galleta grass, white bursage, or desert lily should not be allowed to exceed one-half of the Proper Use Factor (PUF) as outlined in the CDCA Appendix, Volume F. If these levels of perennial use are reached, the ephemeral season should be ended and the animals removed.

As recommended by USFWS and as required through the proposed action, no less than 200 lb/ac of ephemeral forage will be left after grazing. The intent is to ensure that there remains an adequate forage base for wildlife, especially desert tortoise. This will also ensure that enough ephemeral plants remain to produce a sufficient seed crop to ensure the continuation of the ephemeral component in the plant community. Based on past forage measurements after winters with high rainfall, this appears to be working well. Ephemeral growth as high as 3800 lb/ac has been documented prior to sheep turnout.

No federally listed plant species are known to exist in this area. The BLM sensitive species, Alverson's foxtail cactus (*Escobaria vivipara alversonii*) potentially occurs here. It is unlikely to be eaten by sheep but may be trampled by them.

b. Impacts of the No Action Alternative

The impacts on vegetation would be the same as the Proposed Action with the exception that 9,254 acres of the allotment would not be eliminated from grazing resulting in more acreage affected.

c. Cumulative Impacts – Grazing Lease Renewal for Rice Valley Allotment

Cumulative impacts, as defined by Council of Environmental Quality regulations in 40 CFR 1508.7, are “the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or persons undertakes such other actions.” The cumulative impact analysis for the Rice Valley Allotment is tiered to the analysis of the NECO plan as described below.

NECO Plan - Other past, present, and reasonably foreseeable future actions

The NECO described the current environment of the planning area as having been broadly influenced by past activities occurring prior the passage of FLPMA in 1976, such as development of major highways, railroads, and communities in the region. Other important activities related to the baseline condition of the planning area have included mining, military use, recreation, lands actions, wildfire, actions related to Joshua Tree National Park, and livestock grazing. NECO further addressed recent and reasonably foreseeable future changes in land use resulting from FLPMA and other resource management related laws, including State and Federal Endangered Species Acts and the California Desert Protection Act. NECO considered BLM’s six CDCA regional plan amendments that were approved or under preparation as key determinants of environmental conditions (Proposed Plan/FEIS, pages 4-2 through 4-5 and pages 4-170 through 4-176).

NECO Plan – Cumulative Impact

The NECO Plan analyzed the impacts to air quality, water quality, soils, biological resources, wilderness, livestock grazing, cultural, and socio-economic conditions. The main conclusion was that the NECO plan, as well as other CDCA plan amendments, provides new conservation strategies for plant and animal species that have an overall beneficial cumulative impact on many resources (NECO Proposed Plan/FEIS, pages 4-176, 177).

NECO specifically recognized the cumulative conservation benefits of other past actions by Congress in setting aside large areas within the CDCA for parkland, military use, and wilderness; benefits derived from designation by US Fish and Wildlife Service of millions of acres of critical habitat in the CDCA; and benefits resulting from the implementation of management actions established under BLM

land use planning for six regional plan areas in the CDCA. For example, NECO identified cumulative conservation benefits resulting from the restrictions BLM places on OHV use throughout the CDCA (which reduced by 5 % the routes available for OHV use in the NECO plan area), closure of washes to OHV use in Chemehuevi DWMA, elimination of most wild burro herds, elimination of 10 grazing allotments and reallocation of forage on remaining allotments including elimination of ephemeral allocations, and substantial restrictions on grazing within DWMAs (Proposed Plan/FEIS, pages 4-176,177).

Past impacts to vegetation include activities such as mining, vehicle use, grazing, and military maneuvers. Grazing of sheep in the Colorado Desert has occurred continuously since the mid-1800's (Lovich, J.E., and D.A. Bainbridge 1999). Early grazing in the Mojave and Colorado occurred on public lands and was unrestricted. In response to deteriorating conditions, the Taylor Grazing Act was passed in 1943. Three years later, the BLM was created when the Government Land Office and the Grazing Service merged in 1946. However, it was not until the 1970's that grazing was seriously regulated by the BLM. The listing of the desert tortoise in 1990 and implementing Desert Tortoise Recovery Plan recommendations, lead to even greater restrictions on grazing to protect desert tortoises and their habitat. The CDCA land use plan, as amended by NECO, has further increased regulations on grazing that protects vegetation.

The spread and establishment of non-native invasive species occurs through a variety of mechanisms. The BLM's multiple use mission typically results in a variety of activities that are authorized to occur on the same lands. Other activities that may overlap grazing allotments including utility corridors (including electrical towers and natural gas pipelines), general recreation (i.e. hunting, picnicking, camping, and rock hounding), scientific study, and off-highway vehicle (OHV) activities. All of these activities, past, present, and future have contributed to the introduction and spread of non-native/invasive plant species.

Future activities may include grazing, authorized and unauthorized vehicle use, and activation of additional mining claims. The terms and conditions in the proposed action would, offset the impact potential for sheep grazing to introduce and spread non-native/invasive species and cumulative impact of past, present and future activities.

Other impacts in and in the vicinity of the allotment have had impacts on the plant community. The Atchison-Topeka Railroad, Eagle Nest Mine, Colorado River Aqueduct, Rice Valley Dunes OHV area, Blythe-Vidal Powerline, and numerous dirt roads have degraded plant habitat through direct mortality, habitat fragmentation, soil compaction, and introduction of exotic plants. Overall the area remains only lightly impacted by man, due mainly to its isolation and severe summer climate. An increase in the level of human impacts in this area within the foreseeable future is unlikely due

to its remote location and lack of economically desirable resources.

Consultation:

None

Maps:

None

References:

Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento, CA.